The Evolution and Future Prospects of Self-Driving and Autonomous Systems: Technologies, Applications and Societal Impact

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Abstract*: This paper delves into the rapid evolution of self-driving and autonomous systems, examining the cutting-edge technologies that power them, their transformative applications across multiple industries, and the hurdles that must be overcome for their widespread deployment. It also addresses the broader implications of these technologies on society, including ethical concerns, legal frameworks, and the socio-economic challenges that accompany the integration of autonomous systems into the everyday world*

Keywords: Autonomous systems, self-driving vehicles, artificial intelligence, sensor technologies, ethical implications, autonomous drones